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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/743,480	10/17/2001	Gunter Stemple	3701/49519	2497
23911 7590 09/10/2007 CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300			EXAMINER EREZO, DARWIN P	
			ART UNIT 3731	PAPER NUMBER
			MAIL DATE 09/10/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/743,480

Applicant(s)

STEMPLE, GUNTER

Examiner

Darwin P. Erez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 26-28 and 44-47 is/are pending in the application.
- 4a) Of the above claim(s) 47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-28 and 44-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Objections*

1. Claim 45 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The limitation of claim 45 has been incorporated into the independent in the current amendment.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 26-28 and 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,400,781 to Davenport in view of US 4,998,018 to Kurahashi et al. and in further view of US 6,095,986 to Braig et al.

As to claims 44 and 45, Davenport discloses a system for monitoring the carbon dioxide level of a patient, the system comprising a mask **10** capable of surrounding a patient's mouth and nose (Fig. 3); a mask adapter **34** configured to include an air tube **24** connected to an interior portion of the mask; and a sensor adapter **36** connected to the mask adapter **34** for supplying the air received within the air tube towards a gas analyzer (not shown). Element **36** is being interpreted as a sensor adapter since it connects the air tube to a gas analyzer, which inherently includes a sensor. Davenport is silent with regards to the specifics of the gas analyzer.

Kurahashi discloses a respiratory gas analyzer for monitoring the carbon dioxide of a user/patient, the analyzer comprising an analysis duct **210** having an end for receiving air from a user and another end being open so as to lead directly to outside air without the use of a pump (col. 6, lines 9-13); a sensor (IR source **24** and detector **30**) for generating signals proportional to the carbon dioxide level of the exhaled air; wherein the analysis duct comprises windows **23** to allow the IR source and the detector to communicate with each other; and an evaluation device **33**.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Davenport to use the gas analyzer of Kurahashi since the gas analyzer of Kurahashi monitors the carbon dioxide level of exhaled air and is capable of monitoring the exhaled air received from the patient interface of Davenport. Both references deal with monitoring respiratory carbon dioxide level in exhaled air.

Furthermore, it should be noted that the Kurahashi reference discloses a sensor adapter comprising a sensor and an analysis duct, and that one of ordinary skill in the art would combine the sensor adapter of Kurahashi to the mask adapter of Davenport in order for the sensor adapter to receive expired gases from the mask.

With regards to the newly added limitation of the sensor adapter having a receiving device on which the sensor is detachably attached, it is noted that Kurahashi discloses an analysis duct having windows and an IR source and a detector. These elements are taught to be arranged in a circuit diagram in Fig. 2. Thus, Kurahashi is silent with regards to the actual housing assembly of the device. However, Braig

discloses a similar type of arrangement, wherein an analysis duct comprises windows and wherein the outer surface of the analysis duct includes a sensor adapter that detachably receives a sensor/gas analyzer (Fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Davenport/Kurahashi to include a sensor adapter arranged on the analysis duct because it would allow the analysis duct to be detachably fitted to the sensor, which would also allow the sensor to be reused for gas analysis of other patients.

With regards to claim 26-28, Davenport teaches the mask patient interface comprising a probe **30** having an excess oxygen opening provided to supply oxygen to the mask interior; and openings **26** provided in the mask for gas exchange between the mask interior and the outside air.

With regards to claim 46, the sensor of Kurahashi is fully capable of measuring CO<sub>2</sub> content for each exhaled breath of air.

#### ***Response to Arguments***

4. Applicant's arguments with respect to claims 26-28 and 44-46 have been considered but are moot in view of the new ground(s) of rejection.

It is noted that the amendment for independent claim 44 to incorporate the limitations of claim 45 has changed the scope of the invention for the remaining dependent claims since the dependent claims did not previously depend from claim 45. Therefore, the finality of the this Office action is proper.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that

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any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Furthermore, Davenport, Kurahashi and Braig all disclose inventions related toward gas analysis/sampling. Davenport merely discloses the patient interface for allowing gas analysis while Kurahashi and Braig discloses the specifics of the sensor/sensor adapter.

### ***Conclusion***


5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darwin P. Erezzo whose telephone number is (571) 272-4695. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jackie Ho can be reached on (571) 272-4696. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Darwin P. Erezzo  
Examiner  
Art Unit 3731

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